

Claims listing 10/597,680 Vaccari et al our file 1367U101 Dec 21 2009

1. (currently amended) An electronic safety device, for use in a sport-specific helmet for protecting the head of a first participant of an impact-sport, comprising:

(a) a position sensor for sensing the position of the head of the first participant and providing a signal indicative of the sensed head position;

(b) a photo interrupter incorporated in said position sensor and being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

(b) (c)a processor connectable to the position sensor for receiving the signal indicative of the sensed head position, the processor determining if the head of the first participant has been in an unsafe position for a first continuous duration of time, and producing a signal qualifying the determination; and

(c) (d) an indicator connectable to the processor for receiving the signal qualifying the determination, and subsequently indicating that the head of the first participant is in an unsafe position.

2. (previously presented) An electronic safety device according to claim 1 further comprising an activator for switching the electronic safety device between an active mode, in which the electronic safety device operates to monitor of the head position of the first participant, and a standby mode, in which the electronic safety device does not monitor of the head position of the first participant.

3. , 4, 5, 6 , 7 CANCELLED

8. (currently amended) An electronic safety device according to claim 1, ~~wherein the position sensor includes at least one of a photo interrupter,~~
including a piezo element operable to create an alarm and a hall-effect switch.

9. (currently amended) An electronic safety device according to claim 1, wherein the indicator includes at least one of the of a group comprising an audible indicator, a visual indicator and a vibration indicator.

10. (previously presented) An electronic safety device according to claim 1, wherein the processor further determines if the head of the first participant has been in an unsafe position for a second continuous duration of time, which is longer than the first continuous duration of time, and producing a signal for the indicator to stop indicating if the head has been in the unsafe position for the second continuous duration of time.

11. (currently amended) A method, for warning at least one of a first and second participants participant of an impact-sport that the head of the first participant is in an unsafe position, said first participant wearing a sports helmet with an electronic safety device having a photo interrupter incorporated in a position sensor and being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

comprising:

(a) sensing an unsafe head tilt of the first participant beyond a threshold angle by means of said photo interrupter incorporated in said position sensor, said photo interrupter being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

(b) determining if the sensed unsafe head tilt has been maintained for at least a first continuous duration of time; and

(c) indicating to one of the first and second participants that the head tilt of the first participant is unsafe.

12. (currently amended) The ~~A~~ method according to claim 11 further comprising stopping the indicating after a second continuous duration of time.

13. (currently amended) The ~~A~~ method according to claim 11 further comprising stopping the sensing, determining and indicating after a second continuous duration of time.

14. (currently amended) The ~~A~~ method according to claim 13 further comprising re-starting the sensing, determining and indicating after a third continuous duration of time.

15. (currently amended) The ~~A~~ method according to claim 11 ~~for operating electronic safety device, for use in a sport specific helmet adapted to protect the head of a first participant of an impact sport, the method~~ and further comprising:

(a) determining whether or not the electronic safety device is in use; and

(b) ~~one of~~ switching on and maintaining an active mode for the electronic safety device, if it is determined that the electronic safety device is in use.

16. (currently amended) The ~~A~~ method according to claim 15 further comprising ~~one of~~ switching off and maintaining a standby mode for the electronic safety device, if it is determined that the electronic safety device is not in use.

17. (currently amended) The ~~A~~ method according to claim 15, wherein the step of determining whether or not the electronic safety device is in use includes a determining if sufficient ambient light is being received from ~~he~~ the surrounding environment.

18. (currently amended) The ~~A~~ method according to claim 15, wherein the step of determining whether or not the electronic safety device is in use includes a determining if the electronic safety device is in motion.

19. AND 20 CANCELLED